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NEWS 1	Web Page for STN Seminar Schedule - N. America		
NEWS 2	JAN 08	CHEMLIST	enhanced with New Zealand Inventory of Chemicals
NEWS 3	JAN 16	CA/CAplus	Company Name Thesaurus enhanced and reloaded
NEWS 4	JAN 16	IPC	version 2007.01 thesaurus available on STN
NEWS 5	JAN 16	WPIDS/WPINDEX/WPIX	enhanced with IPC 8 reclassification data
NEWS 6	JAN 22	CA/CAplus	updated with revised CAS roles
NEWS 7	JAN 22	CA/CAplus	enhanced with patent applications from India
NEWS 8	JAN 29	PHAR	reloaded with new search and display fields
NEWS 9	JAN 29	CAS Registry Number	crossover limit increased to 300,000 in multiple databases
NEWS 10	FEB 15	PATDPASPC	enhanced with Drug Approval numbers
NEWS 11	FEB 15	RUSSIAPAT	enhanced with pre-1994 records
NEWS 12	FEB 23	KOREAPAT	enhanced with IPC 8 features and functionality
NEWS 13	FEB 26	MEDLINE	reloaded with enhancements
NEWS 14	FEB 26	EMBASE	enhanced with Clinical Trial Number field
NEWS 15	FEB 26	TOXCENTER	enhanced with reloaded MEDLINE
NEWS 16	FEB 26	IFICDB/IFIPAT/IFIUDB	reloaded with enhancements
NEWS 17	FEB 26	CAS Registry Number	crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 18	MAR 15	WPIDS/WPIX	enhanced with new FRAGHITSTR display format
NEWS 19	MAR 16	CASREACT	coverage extended
NEWS 20	MAR 20	MARPAT	now updated daily
NEWS 21	MAR 22	LWPI	reloaded
NEWS 22	MAR 30	RDISCLOSURE	reloaded with enhancements
NEWS 23	APR 02	JICST-EPLUS	removed from database clusters and STN
NEWS 24	APR 30	GENBANK	reloaded and enhanced with Genome Project ID field
NEWS 25	APR 30	CHEMCATS	enhanced with 1.2 million new records
NEWS 26	APR 30	CA/CAplus	enhanced with 1870-1889 U.S. patent records
NEWS 27	APR 30	INPADOC	replaced by INPADOCDB on STN
NEWS 28	MAY 01	New CAS web site	launched
NEWS 29	MAY 08	CA/CAplus	Indian patent publication number format defined
NEWS 30	MAY 14	RDISCLOSURE	on STN Easy enhanced with new search and display fields
NEWS 31	MAY 21	BIOSIS	reloaded and enhanced with archival data
NEWS 32	MAY 21	TOXCENTER	enhanced with BIOSIS reload
NEWS 33	MAY 21	CA/CAplus	enhanced with additional kind codes for German patents
NEWS 34	MAY 22	CA/CAplus	enhanced with IPC reclassification in Japanese patents
NEWS EXPRESS	NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.		
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
NEWS IPC8	For general information regarding STN implementation of IPC 8		

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 15:51:36 ON 15 JUN 2007

FILE 'MEDLINE' ENTERED AT 15:51:56 ON 15 JUN 2007

FILE 'BIOSIS' ENTERED AT 15:51:56 ON 15 JUN 2007  
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=> (triacylglycerol production)  
(TRIACYLGLYCEROL IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s (triacylyglycerol production)  
L1 0 (TRIACYLYGLYCEROL PRODUCTION)

=> s (triacylglycerol) and production  
L2 1133 (TRIACYLGLYCEROL) AND PRODUCTION

=> s 12 and increase (oil content)  
MISSING OPERATOR 'INCREASE (OIL'  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s 12 and (increase oil content)  
L3 0 L2 AND (INCREASE OIL CONTENT)

=> s 12 and ( enzyme)  
1.4 175 1.2 AND (ENZYME)

=> s 14 and (catalyze an acyl-CoA independent reaction)  
L5 0 L4 AND (CATALYZE AN ACYL-COA INDEPENDENT REACTION)

=> s 14 and (S. cerevisiae)  
L6 4 L4 AND (S. CEREVISIAE)

⇒ d 16 ti abs ihib tot

L6 ANSWER 1 OF 4 MEDLINE on STN  
TI Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous expression of an unspecific bacterial acyltransferase.  
AB The bifunctional wax ester synthase/acyl-coenzyme A:diacylglycerol acyltransferase (WS/DGAT) is the key enzyme in storage lipid accumulation in the gram-negative bacterium *Acinetobacter calcoaceticus* ADP1, mediating wax ester, and to a lesser extent, triacylglycerol (TAG) biosynthesis. *Saccharomyces cerevisiae* accumulates TAGs and sterol esters as storage lipids. Four genes encoding a DGAT (*Dg1p*), a phospholipid:diacylglycerol acyltransferase (*Lro1p*) and two acyl-coenzyme

A:sterol acyltransferases (ASATs) (Are1p and Are2p) are involved in the final esterification steps in TAG and steryl ester biosynthesis in this yeast. In the quadruple mutant strain *S. cerevisiae* H1246, the disruption of DGA1, LRO1, ARE1, and ARE2 leads to an inability to synthesize storage lipids. Heterologous expression of WS/DGAT from *A. calcoaceticus* ADP1 in *S. cerevisiae* H1246 restored TAG but not steryl ester biosynthesis, although high levels of ASAT activity could be demonstrated for WS/DGAT expressed in *Escherichia coli* XL1-Blue in radiometric in vitro assays with cholesterol and ergosterol as substrates. In addition to TAG synthesis, heterologous expression of WS/DGAT in *S. cerevisiae* H1246 resulted also in the accumulation of fatty acid ethyl esters as well as fatty acid isoamyl esters. In vitro studies confirmed that WS/DGAT is capable of utilizing a broad range of alcohols as substrates comprising long-chain fatty alcohols like hexadecanol as well as short-chain alcohols like ethanol or isoamyl alcohol. This study demonstrated the highly unspecific acyltransferase activity of WS/DGAT from *A. calcoaceticus* ADP1, indicating the broad biocatalytic potential of this enzyme for biotechnological production of a large variety of lipids in vivo in prokaryotic as well as eukaryotic expression hosts.

ACCESSION NUMBER: 2004600773 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 15574908  
TITLE: Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous expression of an unspecific bacterial acyltransferase.  
AUTHOR: Kalscheuer Rainer; Luftmann Heinrich; Steinbuchel Alexander  
CORPORATE SOURCE: Institut fur Molekulare Mikrobiologie und Biotechnologie, Westfälische Wilhelms-Universität, Münster, Germany.  
SOURCE: Applied and environmental microbiology, (2004 Dec) Vol. 70, No. 12, pp. 7119-25.  
Journal code: 7605801. ISSN: 0099-2240.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200502  
ENTRY DATE: Entered STN: 3 Dec 2004  
Last Updated on STN: 16 Feb 2005  
Entered Medline: 15 Feb 2005

L6 ANSWER 2 OF 4 MEDLINE on STN  
TI Effect of hypertension on lipid metabolism and beta-oxidation in rat aorta and brain microvessels.  
AB The effects of hypertension on various enzyme activities involved in lipid metabolism and beta-oxidation in rat brain microvessels and aorta were studied. The purity of the brain microvessel preparation was confirmed immunologically and microscopically. Activities involved in lipid synthesis, such as triacylglycerol synthesizing activity, acyl-CoA synthesizing activity, acyl-CoA: cholesterol acyltransferase and cytidine diphosphate choline:1,2-diacylglycerol cholinephosphotransferase, were significantly higher in brain microvessels than in aorta in both normotensive and hypertensive rats; lipid hydrolyzing activities, such as lipases and cholesterol esterases, were similar in the two preparations. Beta-oxidation in brain microvessels was more active than in aorta in both groups. Hypertension did not alter these enzyme activities in either aorta or brain microvessels, or change beta-oxidation in the aorta. However beta-oxidation in brain microvessels was significantly lower in hypertensive rats than in normotensive rats. These results suggest that brain microvessels are metabolically more active than aorta, and that their beta-oxidation activity is more susceptible to effects of hypertension. Reduced beta-oxidation in brain microvessels might lead to angioneurosis by derangement of energy production, which in turn may cause cerebral bleeding.

ACCESSION NUMBER: 83203441 MEDLINE

DOCUMENT NUMBER: PubMed ID: 6303275  
TITLE: Effect of hypertension on lipid metabolism and beta-oxidation in rat aorta and brain microvessels.  
AUTHOR: Sasaki N; Morisaki N; Shinomiya M; Matsuoka N; Saito Y; Wakashin M; Ueda S; Kumagai A  
SOURCE: Artery, (1982) Vol. 11, No. 2, pp. 108-18.  
Journal code: 7508494. ISSN: 0098-6127.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198306  
ENTRY DATE: Entered STN: 18 Mar 1990  
Last Updated on STN: 6 Feb 1998  
Entered Medline: 23 Jun 1983

L6 ANSWER 3 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
TI Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous expression of an unspecific bacterial acyltransferase.  
AB The bifunctional wax ester synthase/acyl-coenzyme A:diacylglycerol acyltransferase (WS/DGAT) is the key enzyme in storage lipid accumulation in the gram-negative bacterium *Acinetobacter calcoaceticus* ADP1, mediating wax ester, and to a lesser extent, triacylglycerol (TAG) biosynthesis. *Saccharomyces cerevisiae* accumulates TAGs and steryl esters as storage lipids. Four genes encoding a DGAT (*Dga1p*), a phospholipid:diacylglycerol acyltransferase (*Lro1p*) and two acyl-coenzyme A:sterol acyltransferases (ASATs) (*Are1p* and *Are2p*) are involved in the final esterification steps in TAG and steryl ester biosynthesis in this yeast. In the quadruple mutant strain *S. cerevisiae* H1246, the disruption of *DGA1*, *LRO1*, *ARE1*, and *ARE2* leads to an inability to synthesize storage lipids. Heterologous expression of WS/DGAT from *A. calcoaceticus* ADP1 in *S. cerevisiae* H1246 restored TAG but not steryl ester biosynthesis, although high levels of ASAT activity could be demonstrated for WS/DGAT expressed in *Escherichia coli* XL1-Blue in radiometric in vitro assays with cholesterol and ergosterol as substrates. In addition to TAG synthesis, heterologous expression of WS/DGAT in *S. cerevisiae* H1246 resulted also in the accumulation of fatty acid ethyl esters as well as fatty acid isoamyl esters. In vitro studies confirmed that WS/DGAT is capable of utilizing a broad range of alcohols as substrates comprising long-chain fatty alcohols like hexadecanol as well as short-chain alcohols like ethanol or isoamyl alcohol. This study demonstrated the highly unspecific acyltransferase activity of WS/DGAT from *A. calcoaceticus* ADP1, indicating the broad biocatalytic potential of this enzyme for biotechnological production of a large variety of lipids in vivo in prokaryotic as well as eukaryotic expression hosts.

ACCESSION NUMBER: 2005:119076 BIOSIS  
DOCUMENT NUMBER: PREV200500117462  
TITLE: Synthesis of novel lipids in *Saccharomyces cerevisiae* by heterologous expression of an unspecific bacterial acyltransferase.  
AUTHOR(S): Kalscheuer, Rainer; Luftmann, Heinrich; Steinbuechel, Alexander [Reprint Author]  
CORPORATE SOURCE: Inst Mol Mikrobiol and Biotechnol, Univ Munster, Corrensstr 3, D-48149, Munster, Germany  
steinbu@uni-muenster.de  
SOURCE: Applied and Environmental Microbiology, (December 2004) Vol. 70, No. 12, pp. 7119-7125. print.  
ISSN: 0099-2240 (ISSN print).  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 23 Mar 2005  
Last Updated on STN: 23 Mar 2005

L6 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
TI Expression of Rhizopus oryzae lipase gene in *Saccharomyces cerevisiae*.  
AB The extracellular production of active Rhizopus oryzae lipase (ROL) was carried out by the expression of the ProROL gene encoding a pro-form of ROL (ProROL) using prepro-alpha-factor in *Saccharomyces cerevisiae*. Two forms of recombinant ROL (rROL), rProROL by the expression of the ProROL gene and r28ROL which was a processed form of rProROL in the prosequence, were produced. Such a processing of rROL was catalyzed by the Kex2 membrane-bound endoprotease (Kex2p) in the late Golgi compartment. The ProROL and r28ROL could be produced independently as a single protein by the Kex2-engineered *S. cerevisiae*. Comparison of the properties of purified rROL showed that the prosequence modified some properties of ROL, and implied that the prosequence might play an physiologically important role in vivo. When only mature ROL (mROL) without the prosequence fused to the pre-alpha-factor leader sequence was expressed in *S. cerevisiae*, the enzyme activity was not observed in both the medium and cells. However, when the mROL was co-expressed in trans with the prosequence fused to the pre-alpha-factor leader sequence, the activity was recovered. The results showed that the prosequence may facilitate the folding of mROL, and the covalent linkage of the prosequence to the mROL was not necessary for the function. As the result of the deletion analysis at the N-terminus in the prosequence, the prosequence might work as an intramolecular chaperone. By the cell surface engineering using the gene encoding the C-terminal half of yeast alpha-agglutinin and the insertion of linker peptides, a novel strain displaying lipase on the cell surface was also constructed. Although *S. cerevisiae* itself is unable to utilize triolein, the transformant strain could grow on triolein as the sole carbon source. The cell surface-engineered yeast displaying ROL might be used as a potent biocatalyst.

ACCESSION NUMBER: 2002:401114 BIOSIS  
DOCUMENT NUMBER: PREV200200401114  
TITLE: Expression of Rhizopus oryzae lipase gene in *Saccharomyces cerevisiae*.  
AUTHOR(S): Ueda, Mitsuyoshi [Reprint author]; Takahashi, Shouji; Washida, Motohisa; Shiraga, Seizaburo; Tanaka, Atsuo  
CORPORATE SOURCE: Laboratory of Applied Biological Chemistry, Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Sakyo-ku, Kyoto, 606-8501, Japan  
miueda@sbchem.kyoto-u.ac.jp  
SOURCE: Journal of Molecular Catalysis B Enzymatic, (7 June, 2002) Vol. 17, No. 3-5, pp. 113-124. print.  
ISSN: 1381-1177.  
DOCUMENT TYPE: Article  
General Review; (Literature Review)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 24 Jul 2002  
Last Updated on STN: 29 Aug 2002

=> d his

(FILE 'HOME' ENTERED AT 15:51:36 ON 15 JUN 2007)

FILE 'MEDLINE, BIOSIS' ENTERED AT 15:51:56 ON 15 JUN 2007

L1 0 S (TRIACYLYGLYCEROL PRODUCTION)  
L2 1133 S (TRIACYLGLYCEROL) AND PRODUCTION  
L3 0 S L2 AND (INCREASE OIL CONTENT)  
L4 175 S L2 AND ( ENZYME)  
L5 0 S L4 AND (CATALYZE AN ACYL-COA INDEPENDENT REACTION)  
L6 4 S L4 AND (S. CEREVISIAE)

=> s 12 and (DNA)  
L7 52 L2 AND (DNA)

=> s 17 and 16  
L8 0 L7 AND L6

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### Search Results -

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L2 and L1	5

**Database:**

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US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Search:**

L3	<input type="button" value=""/>	<input type="button" value=""/>	<input type="button" value=""/>
	<input type="button" value=""/>	<input type="button" value=""/>	<input type="button" value=""/>

### Search History

**DATE:** Friday, June 15, 2007    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

**Set Name** **Query**  
side by side

**Hit Count** **Set Name**  
result set

*DB=USPT; PLUR=YES; OP=OR*

<u>L3</u>	L2 and l1	5	<u>L3</u>
<u>L2</u>	(triacylglycerol production)	841118	<u>L2</u>
<u>L1</u>	dahlqvist.in.	23	<u>L1</u>

END OF SEARCH HISTORY

# Hit List

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**Search Results - Record(s) 1 through 5 of 5 returned.**

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1. Document ID: US 6791008 B1

L3: Entry 1 of 5

File: USPT

Sep 14, 2004

US-PAT-NO: 6791008

DOCUMENT-IDENTIFIER: US 6791008 B1

TITLE: Use of a class of enzymes and their encoding genes to increase the oil content in transgenic organisms

DATE-ISSUED: September 14, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Banas; Antoni	Siedlce			PL
Sandager; Line	Copenhagen			DK
St.ang.hl; Ulf	Uppsala			SE
<u>Dahlqvist</u> ; Anders	Furulund			SE
Lenman; Marit	Lund			SE
Ronne; Hans	Uppsala			SE
Stymne; Sten	Svalov			SE

US-CL-CURRENT: 800/281, 435/224, 435/471, 435/483, 536/23.1, 536/23.2, 536/23.7,  
800/278, 800/298, 800/306

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2. Document ID: US 6524900 B2

L3: Entry 2 of 5

File: USPT

Feb 25, 2003

US-PAT-NO: 6524900

DOCUMENT-IDENTIFIER: US 6524900 B2

TITLE: Method concerning a junction barrier Schottky diode, such a diode and use thereof

DATE-ISSUED: February 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Dahlqvist</u> ; Fanny	Johanneshov			SE

Lendenmann; Heinz	Stocksund	SE
Hermannsson; Willy	Vaster.ang.s	SE

US-CL-CURRENT: 438/167; 257/E21.359, 257/E27.051, 257/E29.104, 257/E29.338,  
438/237, 438/328, 438/431

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw. D](#)

3. Document ID: US 6333448 B1

L3: Entry 3 of 5

File: USPT

Dec 25, 2001

US-PAT-NO: 6333448

DOCUMENT-IDENTIFIER: US 6333448 B1

TITLE: Plant enzyme and use thereof

DATE-ISSUED: December 25, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bafor; Maureen	Benin City			NG
Banas; Antoni	08-110 Siedlce			PL
<u>Dahlgvist</u> ; Anders	S-244 66 Furuland			SE
Gummesson; Per-Olov	S-227 38 Lund			SE
Lee; Michael	S-231 97 Klagstorp			SE
Sjodal; Staffan	S-756 50 Uppsala			SE
Stymne; Sten	S-268 90 Svalov			SE
Lenman; Marit	S-22359 Lund			SE

US-CL-CURRENT: 800/295; 435/254.1, 435/255.1, 435/419, 435/69.1, 536/23.6, 800/281

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw. D](#)

4. Document ID: US 6306357 B1

L3: Entry 4 of 5

File: USPT

Oct 23, 2001

US-PAT-NO: 6306357

DOCUMENT-IDENTIFIER: US 6306357 B1

\*\* See image for Certificate of Correction \*\*

TITLE: Process and apparatus for absorbing hydrogen sulphide

DATE-ISSUED: October 23, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Simonson; Erik	Vaxjo			SE

Wallin; Mats	Lund	SE
Bengtsson; Sune	Vaxjo	SE
<u>Dahlqvist; Erik</u>	Vaster.ang.s	SE

US-CL-CURRENT: 423/232; 162/51, 422/169, 422/170, 422/171, 422/181, 423/220

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

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5. Document ID: US PP08319 P

L3: Entry 5 of 5

File: USPT

Jul 27, 1993

US-PAT-NO: PP08319

DOCUMENT-IDENTIFIER: US PP08319 P

TITLE: Poinsettia plant `Lilo White`

DATE-ISSUED: July 27, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
<u>Dahlqvist; Kjell-Ingvar</u>	Hollviken			SE

US-CL-CURRENT: PLT/304

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

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Terms	Documents
L2 and L1	5

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